

Work Order ID 63686

November 10, 2010 8:55:58 AM

Page 1

Item ID: D4211-041

Accept

Setup Start

Revision ID:

Stop

Item Name: Wearplate

Start Date: 11/10/10 Start Qty: 10.00

Cust Item ID:

Required Date: 11/15/10 Req'd Qty: 10.00

Customer:

Reference:

Approvals:

Process Plan: W

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D4211

B

100

0.00



Waterjet

FLOW CNC Waterjet

Memo

0.00

1-Cut as per Dwg ***Make from D4211-1F***

Dwg Rev: B

Prog Rev: B

2-Deburr if necessary

110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Quality Control

Memo

0.00

B10-11-1

10

B10-11-1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 63686

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Page 2

Item ID: D4211-041

Accept



Setup Start



Revision ID:

Item Name: Wearplate

Stop



Start Date: 11/10/10 Start Qty: 10.00



Cust Item ID:

Required Date: 11/15/10 Req'd Qty: 10.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

8/10/10/10

210

130

Form as per dwg

0.00



Brake NC

Memo

0.00

Brake NC

SB 10/10/10

10

140

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

8/10/10/10

410

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 63686

November 10, 2010 8:55:59 AM



Page 3

Item ID: D4211-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Wearplate

Start Date: 11/10/10 Start Qty: 10.00



Cust Item ID:

Required Date: 11/15/10 Req'd Qty: 10.00



Customer:

Reference:

Run Start



Approvals: Process Plan: Date: Tooling: Date:

Stop



QC: Date: SPC (Y/N): Date:

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

150

Weld per dwg A/R Hardcoat S.S. Batch:

0.00



Large Fab

Memo

0.00

Large Fab

M116044

PL 10-11-22 (K11)

160

QC9- Inspect visual per QSI004- Fusion Welds

0.00



QC

Memo

0.00

Quality Control

10.11.22

2410

8 10/11/22

Pk →

165

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

8 10/11/22

(+11)

Dart Aerospace Ltd

W/O: 603686		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
10/14/22	# 160	Perm. change to ac 10	NA	10.11.23			S 10/14/22	

Part No: D4211-041 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 63686

November 10, 2010 8:55:59 AM



Page 4

Item ID: D4211-041

Accept



Setup Start



Revision ID:

Item Name: Wearplate

Stop



Start Date: 11/10/10 Start Qty: 10.00



Cust Item ID:

Required Date: 11/15/10 Req'd Qty: 10.00

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

170

Black Sandtex(Ref:4.3.5.7) per QSI005 4.3

0.00



Powdercoat

M 112588

0.00

Memo

Powder Coating

Start Time: 12:00
Oven Temperature: 320°
Finish Time: 12:30

11

OK 10-11-22

180

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

OK 10/11/22

11

OK

190

Identify as per dwg & Stock Location:

0.00



Packaging

Memo

0.00

Packaging

15497

OK 10-11-22

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 63686

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Item ID: D4211-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Wearplate

Start Date: 11/10/10 Start Qty: 10.00



Cust Item ID:

Required Date: 11/15/10 Req'd Qty: 10.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

200

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

CK 10/11/23 JF

MF

10-11-202

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

November 10, 2010 8:55:57 AM

Page 1

Work Order ID: 63686

Parent Item: D4211-041

Parent Item Name: Wearplate



Start Date: 11/10/10

Required Date: 11/15/10

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP Rev:A 10.09.29 new issue DD verf:EC
10.11.04 as per revB DD verf:EC

IPP Rev:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M304S16GA

Purchased

No

100

sf

170.6000

0.3559

3.746316

43



B10-11-11

304/316 Sheet .063

Location

Loc Qty

Loc Code

MAT

170.6

111323

0

115688

10.6

115953

160

115688

10

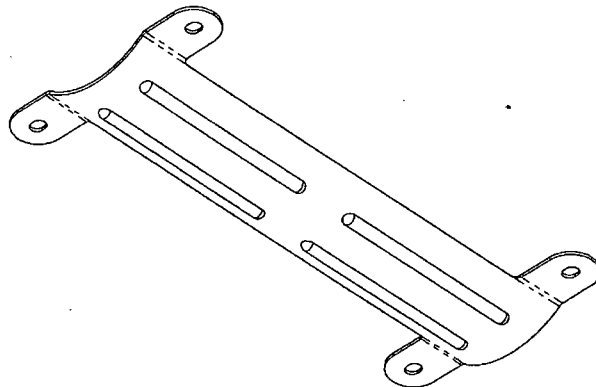
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

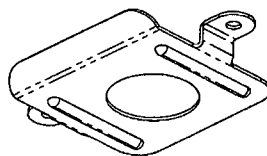
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

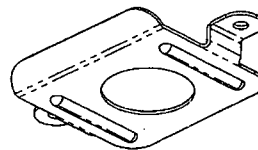
NOTE: Date & initial all entries



D4211-041 WEARPLATE



△ D4211-043 AFT WEARPLATE



△ D4211-045 AFT WEARPLATE

*WLB
63686*

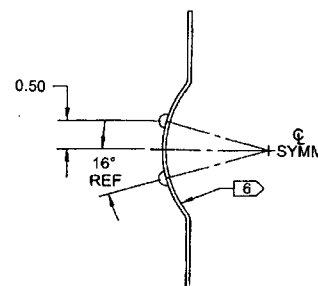
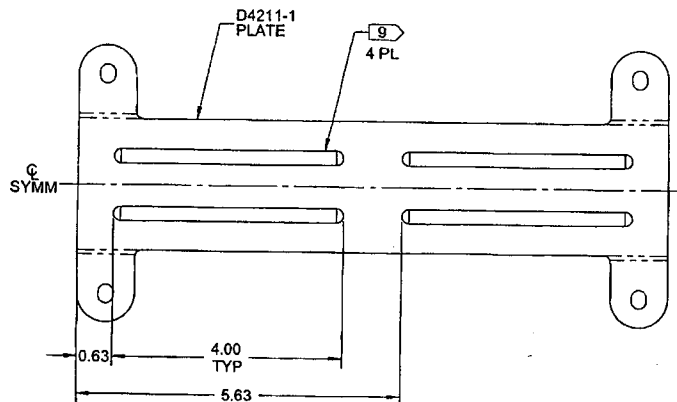
RELEASED
2010-11-03

B	REDESIGNED D4211-043 AND CREATED D4211-045.	MB	10.10.15
A	NEW ISSUE	MB	10.09.30
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.10.15		

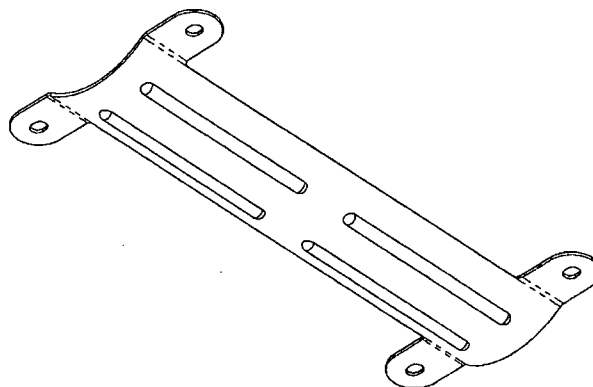
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D4211	REV. B
TITLE 429 WEARPLATE	SHEET 1 OF 6
	SCALE NTS

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ITEM	QTY -041	P/N	DESCRIPTION
	X	D4211-041	WEARPLATE
1	1	D4211-1	PLATE
2	A/R	2059B	HARDCOAT



D4211-041 WEARPLATE



RELEASED
2010-11-03

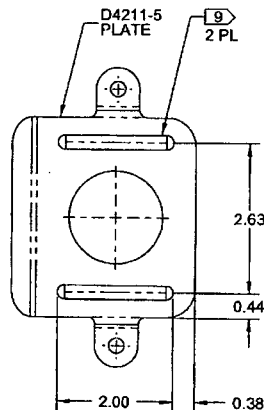
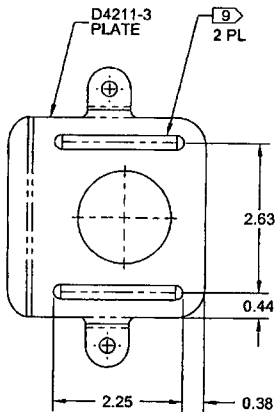
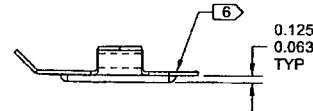
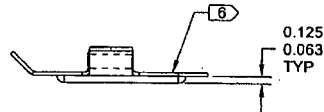
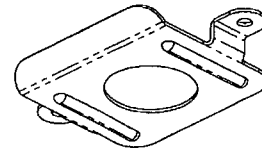
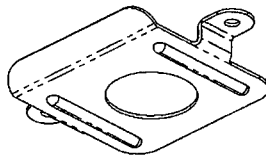
63686

D4211-041 NOTES:

- 1) MATERIAL: NONE
- 2) FINISH: POWDER COAT "BLACK SANDEX" (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4211-041" AND B/N "BXXXXX" PER DART QSI 044 6.1
- 7) WEIGHT: 0.64 lbs
- 8) WELDING: PER DART QSI 004
- 9) 2059B HARDCOAT WELD: 0.063 TO 0.125 HIGH

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D4211	SHEET 2 OF 6
APPROVED		TITLE	SCALE
DE APPR.		429 WEARPLATE	NTS
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ITEM	QTY -043	QTY -045	P/N	DESCRIPTION
	X		D4211-043	AFT WEARPLATE
		X	D4211-045	AFT WEARPLATE
1	1		D4211-3	PLATE
2		1	D4211-5	PLATE
3	A/R	A/R	2059B	HARDCOAT



D4211-043 AFT WEARPLATE

D4211-045 AFT WEARPLATE

D4211-043/-045 NOTES:

- 1) MATERIAL: NONE
- 2) FINISH: POWDER COAT "BLACK SANDTEX" (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4211-04X" AND B/N "BXXXXX" PER DART QSI 044 6.1
- 7) WEIGHT: 0.24 lbs
- 8) WELDING: PER DART QSI 004
- 9) 2059B HARDCOAT WELD, 0.063 TO 0.125 HIGH

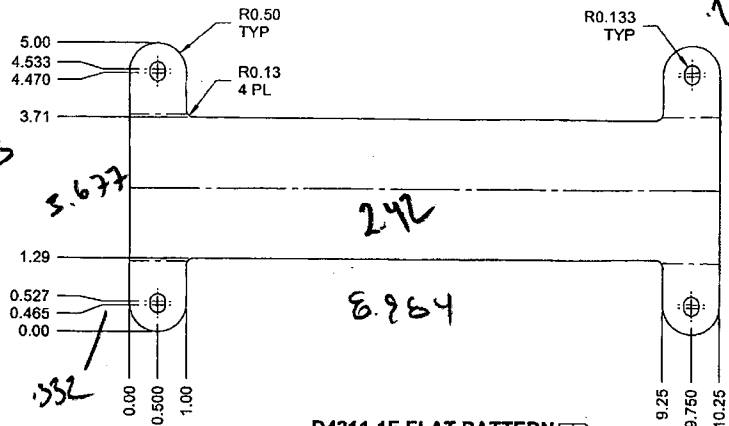
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D4211	SHEET 3 OF 8
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2010-11-03

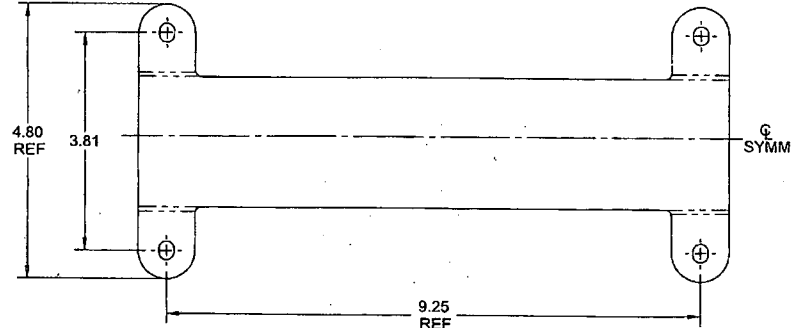
63686

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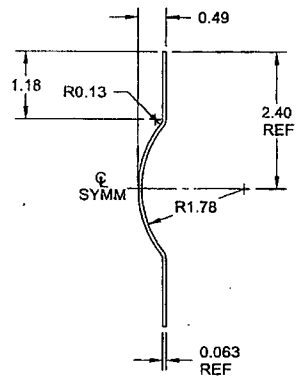
3.943



D4211-1F FLAT PATTERN (1)



D4211-1 PLATE
(MAKE FROM D4211-1F)



63686

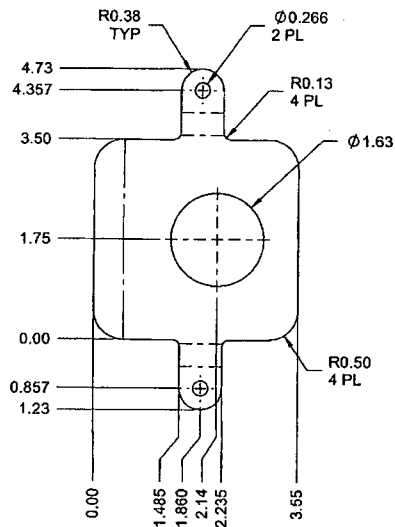
RELEASED
2010-11-03
MD

D4211-1F NOTES:

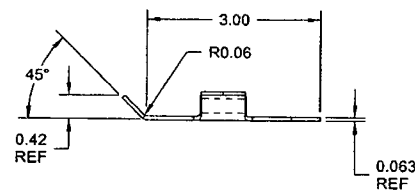
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET ANNEALED 2B FINISH, 16 GAUGE (0.063)
PER AMS 5513 (304) OR 5524 (316) OR ASTM A240 OR ASME SA240
REF. DART SPEC. M304S16GA
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.64 lbs

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D4211	SHEET 4 OF 6
APPROVED		TITLE	SCALE
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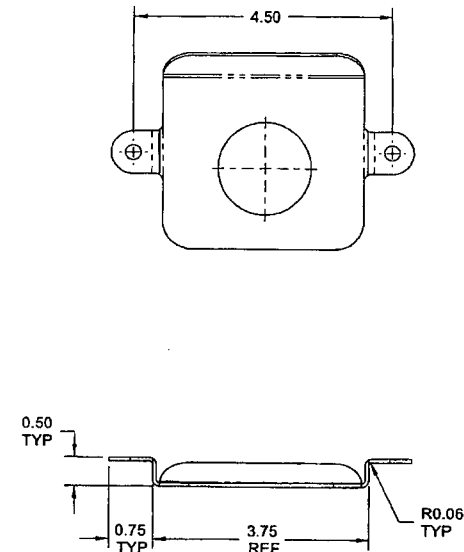
8 7 6 5 4 3 2 1



D4211-3F FLAT PATTERN



D4211-3 PLATE
(MAKE FROM D4211-3F)



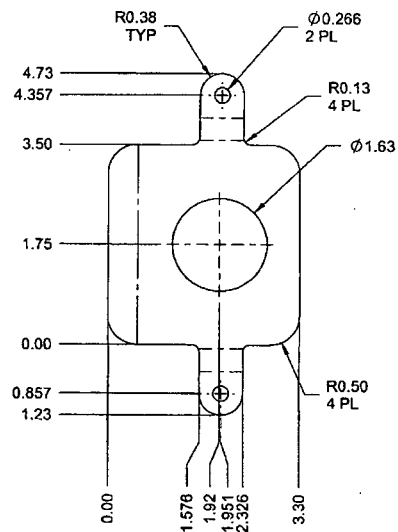
D4211-3F NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET ANNEALED 2B FINISH, 18 GAUGE (0.063)
PER AMS 5513 (304) OR 5524 (316) OR ASTM A240 OR ASME SA240
REF. DART SPEC. M304S16GA
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.24 lbs

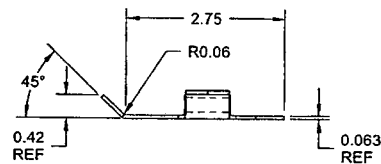
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D4211	SHEET 5 OF 6
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2010-11-03

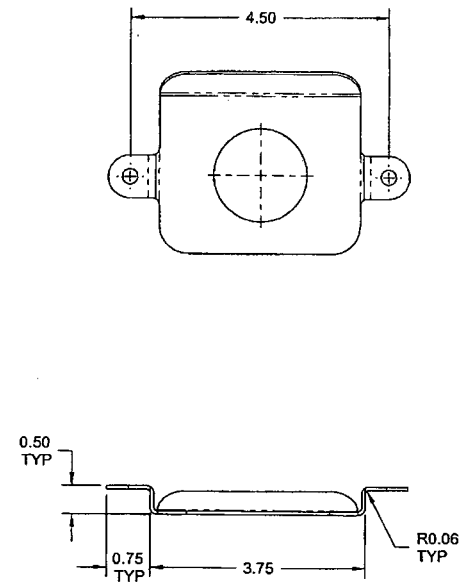
63686



D4211-5F FLAT PATTERN



D4211-5 PLATE
(MAKE FROM D4211-5F)



D4211-5/5F NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET ANNEALED 2B FINISH, 16 GAUGE (0.063)
PER AMS 5513 (304) OR 5524 (316) OR ASTM A240 OR ASME SA240
REF. DART SPEC. M304S16GA
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.22 lbs

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D4211	REV. B
MFG. APPR.		SHEET 6 OF 6	
APPROVED		TITLE	SCALE
DE APPR.		429 WEARPLATE	NTS
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R 2010-11-03
WB

63686